DRAFT FWS Issues list – 3/19/12

This is an interim draft intended only as technical advice, and will change. Do not rely on it.

1. Outflow and entrainment. These are not conclusions, but impressions based on review to date.

(a) Delta outflow: the preliminary project may produce inadequate outflow to support contribution to recovery for delta smelt and longfin smelt.

ICF Response: While outflow is reduced in some months of some years, the biological meaning of these reductions is not always clear. In the case of delta smelt, we attempted to address this uncertainty in Chapter 5 by including focused studies prior to the new intake operation as well as describing how adaptive limits could be used if needed, to increase fall outflows. We hope to continue discussions with the agencies regarding how to address the Fall X2 issues. Regarding longfin smelt, we are looking much more closely as how outflow interacts with this species to more clearly examine the actual changes from the project and how those translate into a biological change. We look forward to working with the agencies once we have information to share on this topic to discuss how the project might be modified to provide adequate flows.

(b) South Delta entrainment: current project entrainment projections appear to have been intended to match BiOp entrainment levels, and may not succeed in contributing to recovery of delta smelt and longfin smelt.

ICF Response: Entrainment was evaluated based on the new operations scenario. This operations scenario was designed, in part, to reduce entrainment levels, which the effects analysis confirmed. Maintained or reduced entrainment occurs in drier years, while wetter years reduce entrainment from already low levels. Our analysis does not take into account the real-time operations management groups that have been effective at reducing the risk of entrainment, and therefore may overestimate entrainment under the PP. Entrainment is only one stressor of many and therefore we believe that a contribution to recovery can still be achieved by maintaining entrainment at already low levels or reducing it and reducing other stressors. Nonetheless, we are evaluating how to minimize entrainment in drier years.

(c) Current project appears to undermine upstream habitat management for winter-run chinook salmon to the extent that it is projected to contribute to extirpation of the ESU.

ICF Response: As NMFS and others have pointed out, the projected adverse temperature

regimes under both existing conditions and the PP in early and late-long term, are unlikely to occur under current real-time operation practices. As a result, the potential cumulative effect of both climate change and the project may be misinterpreted. We would like to discuss the inclusion in BDCP of temperature controls similar to what already exist in the BiOps. This would likely eliminate or substantially reduce the likelihood of BDCP contribution to extinction, and may help to offset some of the climate change effects under some circumstances.

2. Biological Goals and Objectives. Have not been agreed upon, and are foundational for FWS. Objectives provide the targets that the conservation measures are designed to achieve, so they are an essential prerequisite to agreeing on initial operations and other conservation measures. Goals and objectives are also required before adaptive limits can be identified, as choice of adaptive limits depends in part on knowing what the BDCP is intended to do.

ICF Response: We are coordinating with the agencies to refine the BGOs.

3. Adaptive Limits to water operations. Have not been agreed upon, and are foundational for all parties. ALs provide "sideboards" within which water operations may be managed during the life of the permit. As we have said, they must be expressed in terms of specific individual operational criteria that are biologically relevant to achieving the goals and objectives of the BDCP, and cannot be formulated in terms of water project impacts or "blocks of water" that might be available for conservation purposes.

ICF Response: This is a policy-level decision.

4. Habitat tradeoff with flow. The core argument of the BDCP is that it will be possible to create new estuarine habitat in the future that will provide ecological services such as food production that will enable the recovery of covered fish species to such a degree that Delta outflow requirements can be relaxed, yielding more water delivery south of the Delta. It is not known whether such a tradeoff is possible. This fundamental uncertainty makes rigorous, effective adaptive management critical to the success of the BDCP. The conservation plan, adaptive management plan, adaptive management governance, and scientific components of the BDCP must be of sufficient clarity, rigor, and managerial efficiency as to support adaptive management decision-making and allow the evaluation of effects and progress, or lack thereof, in producing habitat benefits as the BDCP is implemented.

ICF Response: The information and tools we would need to address this issue in the EA do not exist. Therefore, this needs to be handled with adaptive management, which requires additional coordination to develop sufficient clarity and rigor.

5. Governance. Has not been agreed upon, and several aspects are foundational for all parties. AM governance must include FWS, NMFS, and DFG and be strong enough, and local enough, that tough adaptive management decisions that may have significant costs can be made efficiently. Without these features, adaptive management is very likely to fail.

ICF Response: This is a policy-level decision.

6. Initial operations. Have not been agreed upon, and are foundational for all parties. Initial operations supporting contribution to recovery for delta smelt and longfin smelt are essential if the BDCP is to be permitted as an HCP. These initial operations need to be coupled with a fully-developed adaptive management program to ensure that operations continue to support recovery. Unresolved operations issues include screening criteria, such as approach and sweeping velocity, and exposure time, that are protective of delta smelt.

ICF Response: This is a policy-level decision.

7. Effects analysis. ICF has completed a "net effects" summary for its effects analysis, but has not yet completed revisions to the underlying effects appendices upon which the net effects summary depends. Consequently, it is unclear to us whether our major issues with the methods and approaches used in the effects analysis were addressed. As it is desirable that all parties eventually rely on the ICF effects analysis to support a common position on BDCP requirements, the incomplete and disputed state of the ICF effects analysis is a barrier to progress. It is unclear whether there is time before the July announcement to resolve all of the issues still outstanding, so it is important at this time that we strive to identify key points of the effects analysis that need to be addressed to support a July announcement.

ICF Response: We have been coordinating closely with agency staff on many of the issues raised in earlier drafts of the EA and all issues have been addressed or are in the process of being addressed. Besides some very key and isolated topics, ICF is not aware of any outstanding disputes. The revised Appendix C and B will be provided very shortly.